

SOUTH PACIFIC COMMISSION

FIFTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES
(Noumea, New Caledonia, 1 - 5 August 1983)

SUMMARY REPORT OF SOUTH PACIFIC COMMISSION ACTIVITIES
UNDER THE FISHERIES WORK PROGRAMME - COASTAL RESOURCES

1. The activities of the South Pacific Commission in the development of coastal fisheries throughout the region, covering the period August 1982 to July 1983, will be reported in detail under agenda items 4 and 5. A brief summary is presented below to assist discussion under this item.

I - DEEP SEA FISHERIES DEVELOPMENT PROJECT

2. The Deep Sea Fisheries Development Project operates at village or artisanal level in SPC member countries following a formal government request. Its objectives are:

(i) to promote the development or expansion of artisanal fisheries throughout the region based on fishery resources which are at present under-utilised, in particular the deep bottom resources of the outer reef slope and offshore aggregations of surface and mid-water pelagic fish;

(ii) to develop and evaluate new simple technology, fishing gear and techniques suitable for use by village fishermen which will enable fishermen to substantially increase catches while reducing dependence on costly imported fuels;

(iii) to provide practical training in appropriate fishing techniques to local fishermen and government fisheries extension workers.

3. The Project superseded the Outer Reef Artisanal Fisheries Project in 1978, and since that time has completed 27 visits to 15 countries, with one still in progress. Almost all the countries where the Project has operated have requested return visits, a testament to its relevance and success. This is in large part due to the Project's village-level orientation, and the commitment of the three masterfishermen, who live the lifestyle and share the problems of the fishermen involved.

4. Seven country visits were partially or wholly completed during the past year (1 August 1982 to 3 July 1983) as detailed in Table 1.

Table 1 - DSFD Project activities, 1st August 1982 to 31 July 1983

Country	Master-fisherman	Start date	Finish date	Primary objectives	Total catch (kg) (Dropline catch)	Dropline catch rate (kg/reel-hour)
Niue	P. Mead	19/5/82-16/2/83		Gear development and exploratory fishing	3,003 (456)	5.2
Tokelau	P. Taumaia	29/5/82-15/9/83		Resource assessment and training	1,800 (1,514)	2.7
Western Samoa	P. Taumaia & L. Chapman	3/11/82-3/1/83		Evaluate status of deep bottom resource	1,753 (1,753)	5.1
Vanuatu	L. Chapman	21/1/83-7/4/83 and 8/5/83-24/7/83		Gear development and technical assistance to rural fishing groups	5,666 (2,536) (up to July 1st)	6.0
Cook Islands	P. Mead	17/2/83-21/7/83		Gear development and exploratory fishing		
Fiji	P. Taumaia & L. Chapman	21/3/83-30/4/83		Participation with UNDP and Fiji Government in hurricane relief/fisheries rehabilitation programme	787 (412) (Chapman only)	6.2
Palau	P. Taumaia	1/5/83 continuing		Training programme for fishing co-operatives	3,516 (3,502) (up to June 16th)	5.9

5. Dropline fishing with wooden handreels remained the major technique used by the masterfishermen and produced over 60 per cent of the 15 tonnes of fish caught during the year's operations. Project activities in the field of deep-bottom fishing are undergoing a change in emphasis in line with country requirements. Earlier Project visits have assisted many SPC member countries to develop their deep bottom fisheries by training fishermen and demonstrating droplining techniques. A number of countries now have established fisheries and the demand for this type of activity is diminishing, with only two Project visits (Tokelau and Palau) involving major training components. Instead, requests now tend to be for assistance in a broader range of fisheries related to activities.

6. Countries of the region are also becoming increasingly aware of the potential benefits to be gained from other coastal and inshore resources so far not extensively exploited, and of the need to develop or improve fishing gears and techniques to harvest this potential. This is reflected both in the type of assistance being requested of the Project, and in the recommendation from the Fourteenth Regional Technical Meeting on Fisheries, which "commended the South Pacific Commission on the success of the Deep Sea Fisheries Development Project, and recommended its continuation with more emphasis on gear development". Three country visits this year (Niue, Vanuatu and Cook Islands) involved major gear development components, frequently in association with fish aggregation devices, the use of which is becoming increasingly widespread. Gear development work focused on a variety of methods, including vertical longlining, pelagic gill netting and subsurface trolling, and is reported in detail in working paper 2.

7. Finally, one country visit involved participation with UNDP and the Fiji Government in a major fisheries rehabilitation programme, after two cyclones caused severe damage to many of Fiji's coastal and island communities. SPC involvement followed an urgent request for emergency assistance by the Fiji Government, and was limited to ensuring maximum short-term production during the programme's initial phase, and assessments of local damage. The exercise was unscheduled and served to further underline the versatility and flexibility of the Project.

II - DEEP BOTTOM RESOURCES SURVEY

8. With the increasing development of deep bottom fisheries around the region, the need for baseline data to enable sound management of this resource continues to grow. Although recommendations from the 1979, 1980, 1981 and 1982 Technical Meetings have repeatedly emphasised the priority countries attach to this activity, the Commission has so far been unsuccessful in its attempts to locate funds for the appointment of a suitably qualified scientist to carry out the proposed survey.

9. The 1982 Technical Meeting redirected this project by recommending that the Commission undertake a detailed analysis of already existing data from the DSFD Project and, where possible, co-ordinate the activities of the countries of the region in this field. This work can commence early in 1984 providing that the Commission is able to locate funding for the technical support which will be required.

III - SPC GRANTS-IN-AID (FISHERIES)

A. Inter-country Study Visits

(i) Study of FAD-fishing techniques - Western Samoa

10. Mr Walu Sak, Fisheries Extension Officer with the Vanuatu Government's Fisheries Department, visited Apia for 11 days to gain practical knowledge of the fishing techniques used by Western Samoan fishermen operating around FADs. Mr Sak stayed for the duration of his visit with a commercial fisherman and his family on the north coast of Upolu island, joining in twice-daily fishing trips to inshore FADs. The main techniques used were trolling and longlining for large yellowfin or marlin using live skipjack as bait. Mr Sak is responsible for training members of Vanuatu's rural fishing groups in the use of fishing methods aimed at harvesting FAD-associated fish, and his experience in Western Samoa's well established fishery will be transferred to many novice operators in his home country.

(ii) Study of boat-building techniques - Fiji

11. Mr Robin Blakey-Marshall, Principal Fisheries Officer of the Solomon Islands Government, and Mr Nelson Koroi, shipyard manager of National Fisheries Development, Ltd., Solomon Islands, each spent 4 days in Fiji to examine boatbuilding techniques in the Fisheries Division's boatyard. As well as learning more of the practical construction techniques used by the boatyard in producing modified FAO 28-foot wooden dories, the two officers also examined the operation of the Fisheries Division's closely linked Rural Training Scheme. Under this programme rural fishermen undergo a six-month training course during which they participate in the construction of vessels which they can purchase on concessionary terms at the end of the course. Messrs Marshall and Koroi are involved in establishing a similar scheme in the Solomon Islands.

(iii) General fisheries familiarisation - Apia

12. Mr Loloa, Agriculture and Fisheries Extension Officer from Tokelau, spent two weeks in Apia on a familiarisation visit with the Western Samoa Fisheries Department immediately prior to attending the 1983 Technical Meeting. Mr Loloa is closely involved in assisting Tokelau's fishermen optimise their activities.

(iv) Tuna industry study - American Samoa

13. Mr S. Tui Cavuilati, Principal Fisheries Officer of Fiji's Fisheries Division, will travel to Pago Pago in September on a familiarisation tour of American Samoa's tuna industry. As Fiji is cautiously developing a tuna purse-seine fishery, Mr Cavuilati's study of the shoreside aspects of managing purse-seine vessels, canneries and transshipping operations will be particularly relevant. This visit was initially scheduled for July, but had to be postponed due to unforeseen circumstances.

B. Short-term Expert and Specialist Services

(i) Fish aggregation devices - regional

14. In line with recommendation No.10 of last year's technical meeting, Lieutenant Richard Boy of the U.S. Coastguard, was engaged as a consultant to evaluate the technical and engineering aspects of fish aggregation devices designs in the SPC area. Lt. Boy, who is currently on secondment to the National Data Buoy Center of the U.S. Department of Commerce, is an expert in deep water mooring design and performance, and in April spent two weeks travelling with Fisheries Adviser Barney Smith to consult with fisheries officers of the region on FAD programmes. Apart from five countries visited during the study tour (Vanuatu, Fiji, American Samoa, Western Samoa and Cook Islands), Lt. Boy also spent four days in Noumea preparing a draft report, and visited officers involved in FAD programmes in French Polynesia, Hawaii and the U.S. West Coast while in transit to and from his home base in Mississippi.

15. The report of the FAD design study is presented as working paper 5 to this Meeting.

(ii) Trochus shell hatchery feasibility study - Vanuatu

16. With the consent of the Palau Government, Mr Gerald Heslinga, Aquaculture Specialist with the Marine Mariculture Demonstration Centre in Palau, will carry out a consultancy for the Government of Vanuatu in order to examine the feasibility of establishing a hatchery for Trochus niloticus. A small button-making industry in Vanuatu currently depends on the harvesting of wild Trochus stocks by small-scale collectors for its supply of pearl shell, and the Vanuatu Fisheries Department anticipates that production from this fishery could be increased by seeding reef areas with cultured juveniles. Mr Heslinga, who has for several years been in charge of a similar project involving juvenile rearing of both Trochus and giant clams, is scheduled to carry out the consultancy in September. At this time he will investigate the technical aspects of hatchery operation, and evaluate the potential benefits of such a project to the industry.

C. Assistance to Applied Research

(i) Fishing vessel evaluation - Cook Islands

17. Funding has been approved to assist the Cook Islands Government with the import of a prototype aluminium trimaran fishing vessel from Australia for evaluation and sea trials. The Cook Islands Government is considering importing 20 of these vessels for fisheries development work due to their low cost and apparent value for money. The design, based on the "banca" from the Philippines, has not been proven in a Pacific Island situation, and SPC assistance was requested to enable the vessel to be rigorously tested under actual fishing conditions in the Cook Islands. The outcome of this field evaluation will determine whether the Cook Islands Government proceeds with its plan to import larger numbers of these vessels.

IV - TRAINING

SPC/Nelson Polytechnic Fisheries Training Course

18. Fifteen students from 13 SPC member countries and territories attended the fourth SPC/Nelson Polytechnic Fisheries Training Course, which ran from February to June this year. The intake was the largest yet and was commended by the course tutors as being the best to date. Several older or middle-level officers showed very mature and highly motivated attitudes to the course and this encouraged the younger students to adopt a similar approach.

19. Despite the large intake, many nominations could not be accommodated on this year's course. Indications are that the demand for places will be equally great next year, and substantive funding has already been committed by several organisations. Despite this, the college has requested that future intakes be restricted to a maximum of 12 students to keep the student/tutor ratio at an optimum level for a course of this nature.

V - COLLECTION AND DISSEMINATION OF INFORMATION

A. Fisheries Newsletter

20. The format of the SPC Fisheries Newsletter was simplified late in 1982 to allow the presentation of timely information, minimise production delays and enable regular quarterly production. The first issue in the revised style was distributed in April 1983, and the initial response has been favourable and encouraging.

B. Baitfish Identification Handbook

21. This is now in press after delays resulting from major alterations made necessary by changes in the taxonomic classifications of a number of key species.

C. Handbooks on Small-scale Fishing Techniques

22. Two handbooks, one on bottom fishing techniques and one on trolling methods, are scheduled for production immediately after this meeting. The three SPC masterfishermen and other fisheries staff will collaborate in their production, allowing the distillation of a collective experience second to none in the region.

VI - OTHER ITEMS

A. Expert Committee on Ciguatera

23. This Committee met on Saturday 22nd January in Suva, Fiji, immediately after the termination of a World Health Organization training course on medical aspects of fish poisoning. The Committee reviewed recent progress in research into ciguatera poisoning, and several invited observers addressed specific problems of local concern in this field. The Committee's report is currently in press.

B. Synopsis of Small Vessel Types

24. This was recommended by last year's technical meeting. Manpower shortages have however delayed implementation and the synopsis is currently in a very preliminary stage.

VII - SUMMARY OF ACTION TAKEN IN RESPONSE TO RECOMMENDATIONS OF
THE FOURTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

Recommendation No. 1 (Deep Sea Fisheries Development Project)

The meeting once again commended the South Pacific Commission on the success of the Deep Sea Fisheries Development Project and recommended its continuation with greater emphasis on gear development.

Action taken: Section I refers.

Recommendation No. 2 (SPC/Nelson Polytechnic Fisheries Training Course)

The meeting recommended that the South Pacific Commission convey to the New Zealand Government the opinion that the South Pacific Commission/Nelson Polytechnic fisheries course provided a valuable and much-needed training avenue for Pacific Islanders, and requested the South Pacific Commission to express to the New Zealand Government the wish that the course be continued.

Action taken: Course continued. Section V-A refers.

Recommendation No. 3 (Fish Handling and Processing Workshop)

A workshop on the handling and processing of fishery products was recommended for inclusion in the agenda of the Fifteenth South Pacific Commission Regional Technical Meeting on Fisheries in 1983.

Action taken: To be held under Agenda Item 7.

Recommendation No. 4

The meeting recommended that the South Pacific Commission prepare a synopsis of small vessel types in present use or being developed for Pacific Island countries. The synopsis should include details on building costs, applicability to various fisheries, and running costs.

Action taken: In preparation. Section VI-B refers.

Recommendation No. 5

The meeting recommended that future activities under the Deep Bottom Resources Survey Project be redirected to undertake, as a matter of some priority, a detailed analysis of the extensive data base compiled by the South Pacific Commission Deep Sea Fisheries Development Project, to co-ordinate, where possible, activities of countries in the region and to undertake short-term field studies, where necessary.

Action taken: Section II refers.

Recommendation No. 6

The meeting recommended that the first meeting of the Tuna and Billfish Expert Advisory Committee be convened in conjunction with the Fifteenth Regional Technical Meeting on Fisheries and, if necessary, in order to effect this arrangement, the South Pacific Commission seek appropriate funding.

Action taken: Scheduled under Agenda Item 6b.

Recommendation No. 7

Recognising its potential value to both the Tuna and Billfish Assessment Programme and countries of the region, and appreciating the progress already made in introducing new techniques, the meeting recommended that the South Pacific Commission request the French Government to increase its efforts to develop satellite imagery techniques for use with oceanographic data and make such information available to the South Pacific Commission and to countries of the region in accordance with approved priority item 8 of the Tuna and Billfish Assessment Programme.

Action taken: Fruitful discussions have been held with the French Government on which the French delegate to the meeting will comment under Agenda Item 6b.

Recommendation No. 8 (Training Course on Fisheries Statistics)

The meeting recommended that the South Pacific Commission run a general fisheries statistics training course for fisheries officers of the region and that financial support be sought.

Action taken: A statement on progress with funding the course will be made at the meeting.

Recommendation No. 9

The meeting recommended that the South Pacific Commission, in consultation with member countries and territories, define an appropriate set of objectives for observer programmes of the region, investigate the possibility of harmonising existing observer programmes in the region, perhaps through the establishment of a South Pacific Commission observer programme co-ordinator. It was also requested that the South Pacific Commission determine the need for placement of professional observers in the field to conduct particular research, and provide support for national observer programmes when required.

Action taken: Addressed under Agenda Item 6b.

Recommendation No. 10 (Fish Aggregation Device Design Study)

The meeting endorsed the objectives of the South Pacific Commission design study on Fish Aggregation Devices as given in the project document and recommended that the South Pacific Commission continue its efforts to locate a suitably qualified consultant to assist with this study as soon as possible.

Action taken: Completed. Section III-B (i) and working paper 5 refer.
